

Contents

Marine Chemistry, Volume 52 (1996)

Research Papers

Oxidation of hydrogen sulfide by hydrous Fe(III) oxides in seawater W. Yao and F.J. Millero	1
Spectrophotometric pH measurements of surface seawater at in-situ conditions: absorbance and protonation behavior of thymol blue H. Zhang and R.H. Byrne	17
Microscale characterization of algal and related particulate organic matter by direct temperature-resolved mass spectrometry T.I. Eglinton, J.J. Boon, E.C. Minor and R.J. Olson	27
Phosphorus binding by poorly crystalline iron oxides in North Sea sediments C.P. Slomp, S.J. Van der Gaast and W. Van Raaphorst	55
Vertical fluxes of polycyclic aromatic hydrocarbons and organochlorine compounds in the western Alboran Sea (southwestern Mediterranean) J. Dachs, J.M. Bayona, S.W. Fowler, J.-C. Miquel and J. Albaigés	75
Electrochemical study of sulfur species in seawater and marine phytoplankton cultures I. Ciglenečki and B. Čosović	87

Research Papers

Pyrite formation under conditions approximating those in anoxic sediments. I. Pathway and morphology Q. Wang and J.W. Morse	99
Oxygen penetration depths and fluxes in marine sediments W.-J. Cai and F.L. Sayles	123
At-sea intercomparison of two newly designed underway $p\text{CO}_2$ systems — encouraging results A. Körtzinger, H. Thomas, B. Schneider, N. Gronau, L. Mintrop and J.C. Duinker	133
Kinetics of methyl halide production by reaction of DMSP with halide ion Z. Hu and R.M. Moore	147
Extraction and characterization of organic ligands from oceanic water columns by immobilized metal ion affinity chromatography T. Midorikawa and E. Tanoue	157
Stability and preservation of primary calibration solutions of nutrients A. Aminot and R. Kérouel	173
Erratum	183

Research Papers

Fine scale distribution of nitrous oxide in marine sediments	
I. Koike and K. Terauchi	185
Vertical distribution of dissolved sulphur species in coastal marine sediments	
C. Gagnon, A. Mucci and É. Pelletier	195
A comparison of sample handling and analytical methods for determination of acid volatile sulfides in sediment	
B. Lasorsa and A. Casas	211
Chemical fractionation of phosphorus and cadmium in the marine diatom <i>Phaeodactylum tricornutum</i>	
I. Kudo, H. Kokubun and K. Matsunaga	221
Factors controlling the temporal variation of fatty acids in piculate matter during a phytoplankton bloom in a marine mesocosm	
K. Hayakawa, N. Handa, K. Kawanobe and C.S. Wong	233
Interactions of copper, lead and cadmium with the dissolved, colloidal and particulate components of estuarine and coastal waters	
F.L.L. Muller	245
Announcement	269

